

P10.07.01 production run

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P10.07.01

- Started production on 10/16/2001
- Ended on 11/06/2001
- 1 2-day downtime
- 1 1-day downtime
- Estimated time was 18 days,
- Actual time was 21 days, including 3 down days.



What is p10.07.01

- Current Production version of code.
- Described at
 - http://www-d0.fnal.gov/computing/algorithms/status/index.html
- Has resistor correction for calorimeter
- Nada in shadow mode
- SMT pedestals for improved tracking
- Fix to L1/L3 info in root-tuple



Statistics

- Do runs 129194-133030
- 10.2M events in non-dagtest streams
- 7.6 M events in shiftsets (hard to count)
- 5.87M events run through reco (5.63M readable?)
- 5.80M root events output

Remaining 1.7 M events are:

almost all input tape failures

~100,000 bad events from bad data

<50,000 lost due to reco crashes

~100,000 lost due to reco_analyze crashes



How to get the data

- Reco available from sam as:
 - --dim="version p10.07.01 and data_tier reconstructed and file_name %raw%"
- Root available as
 - --dim="version p10.07.01 and data_tier root-tuple and filename %raw"

All root files are on disk on d0mino



Efficiency

- 1.8M seconds of running time including down days
- 6.9M events processes
- · -> DC rate of 3.8 Hz
- Used 72 fast, 40 slow CPU's
- · CPU's spent much of their time waiting for data
- Actual CPU utilization 40-50% of potential



'Known bad runs'

- A small number of runs have duplicate files or other problems.
- This is due to an early problem with merging files when run was being processed twice due to 'special' requests.
- · Some of this can be fixed by removal of duplicate files.
- 131964 all double set of files
- 133020 1-12 metadata problem
- 133023 1-4 duplicate files
- 130194 45 metadata problem
- 132568 1-14 metadata problem
- 132987 54 metadata problem



Problems

- Sam db connection losses probably cured last week but forced multiple (~3) resubmissions of each job.
- Merge algorithms vulnerable to multiple processing of same fileset
- ~1% of tape stores required hand intervention